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# **Overview**

### Identification

#### **COUNTRY**

Mozambique

#### **EVALUATION TITLE**

**Urban Land Regularization** 

#### **EVALUATION TYPE**

Independent Impact Evaluation

#### **ID NUMBER**

DDI-MCC-MOZ-MSU-URBAN-2012-V1.2

### Version

#### **VERSION DESCRIPTION**

Anonymized dataset for public distribution

## Overview

#### **ABSTRACT**

This baseline survey was developed for the impact evaluation of activities related to 'improving land access in urban hotspot areas.' The site-specific interventions in priority bairros within Nampula city and Monapo vila are the subject of this impact evaluation. Activities to be evaluated include: a) Satellite mapping and inventory exercise; b) Capacity building of the local cadastral offices; c) Piloting a sound approach to area-wide registration of land rights.

The evaluation approach is to use a non-experimental comparison group difference-in-difference (DiD) design approach for this evaluation. Data was collected at household level from both the treatment and control areas before and after the intervention. The baseline report for the evaluation presents the results of the baseline survey conducted in 2010-11 of 1,690 households in two urban cities of Nampula province. The results of the baseline data analysis aim to provide a picture of the status of surveyed households in study areas of Nampula city and Monapo vila across three broad categories: a) socio-economic characteristics (i.e., demographics, sources of income, asset holdings, and access to credit; b) land characteristics (i.e., land ownership, land markets, land investments, perceptions on tenure security and knowledge about land law and rights); and c) welfare characteristics (i.e., level of income, consumption and expenditure).

#### **EVALUATION METHODOLOGY**

Difference-in-Difference

#### **UNITS OF ANALYSIS**

Households and parcels.

#### KIND OF DATA

Sample survey data [ssd]

#### **TOPICS**

Topic	Vocabulary	URI
Land	MCC Sector	
Gender	MCC Sector	

#### **KEYWORDS**

Land conflict, Land parcel, Urban land, Land rights

# Coverage

#### **GEOGRAPHIC COVERAGE**

The Baseline survey was conducted in five (5) bairros in Nampula city and eleven (11) bairros in Monapo vila.

#### **UNIVERSE**

The universe for this study included about 55,150 households (total population estimate 260,000) residing in the five study bairros in Nampula and 8,897 households (total population estimate (38,000) residing in 11 study bairros in Monapo.

# **Producers and Sponsors**

#### **PRIMARY INVESTIGATOR(S)**

Name	Affiliation
MCA/MSU	

#### **OTHER PRODUCER(S)**

Name	Affiliation	Role	
Michigan State University		Design and implementation	

#### **FUNDING**

Name	Abbreviation	Role
MCA Agreement with MSU	MCA/MSU	
Millennium Challenge Corporation	MCC	

## Metadata Production

#### **METADATA PRODUCED BY**

Name	Abbreviation	Affiliation	Role
Millennium Challenge Corporation	MCC		Metadata Producer

#### **DATE OF METADATA PRODUCTION**

2014-12-10

#### **DDI DOCUMENT VERSION**

Version 1.2 (December 2014)

#### **DDI DOCUMENT ID**

DDI-MCC-MOZ-MSU-URBAN-2012-V1.2

# MCC Compact and Program

#### **COMPACT OR THRESHOLD**

Mozambique

### **PROGRAM**

The Government of the Republic of Mozambique and the Millennium Challenge Corporation (MCC), on behalf of the United States Government, have signed a Compact Agreement (which entered into force on September 22, 2008) for a US \$507 million grant to be implemented over a 5 year period. The overall objective of the proposed Program is to reduce poverty through economic growth in the four Northern Provinces of Mozambique (Niassa, Cabo Delgado, Nampula, and Zambézia). The Program involves crucially needed investments in water, sanitation, and transport infrastructure, land tenure security, agriculture, capacity building, and institutional strengthening. The Land Tenure Services Project (or simply the "Land Project") of the Mozambique MCA compact aims to establish more efficient and secure access to land by improving the policy and regulatory framework and helping beneficiaries meet their immediate needs for registered land rights and better access to land for investment. The Project's objectives are to: (i) increase the level and value of investment on land; (ii) increase access to land; (iii) reduce the costs associated with acquiring land user rights; and (iv) resolve and prevent

conflicts over land. Investments are targeted to all four Northern Provinces, at all levels of administration – National, Provincial, and District / Municipal – and across a range of beneficiaries, including rural individual land holders, rural communities, urban land holders, and domestic and international investors.

#### MCC SECTOR

Land (Land)

#### **PROGRAM LOGIC**

The Land Project is comprised of three mutually reinforcing activity areas (or Pillars) with different geographic coverage: Pillar I: Policy Activity (all activities implemented at the national level). Support for an improved policy environment, including addressing implementation problems for the existing land law and engaging in regulatory review to improve upon it. Examples of activities include: 1. Development of a national land administration and needs assessment 2. Formation of Land Policy Consultative Forum that will provide technical and logistical support to monitor progress on land legislation 3. Broad campaign of public education, outreach and rising awareness of non-judicial dispute resolution methods 4. Expand program on legal and judicial training 5. Advisory services to DNTF Pillar II: Capacity Building Activity. Building the institutional capacity to implement policies and provide quality public land-related services. Examples of activities under this Pillar include: 1. Professional development and training (national level) 2. Further development of LIMS (national level) 3. Technical Assistance to the upgrading of facilities (4 Provincial SPGCs and 12 selected district land service office) 4. Technical Assistance for cadastral development in selected municipalities (8 selected municipalities) Pillar III: Site Specific Activity. Facilitating access to land use by helping people and business with (i) clear information on land rights and access; (ii) resolution of conflict with more predictable and speedy resolution of land and commercial disputes - which in turn creates better conditions for investment and business development; and (iii) registering their grants of land use (land titles to long-term or perpetual-use rights). Examples of activities include: 1. Mapping and inventory exercise (all 12 selected districts and 8 municipalities) and piloting an approach to area-wide registration of land rights in "Priority areas"; Streamlining investor and farmer access to land by making available simple informational tools and guidelines (selected hotspot areas within the 12 districts and 8 municipalities) 2. Support of Community Land Fund (iTC) (3 provinces -Zambezia, Nampula and Niassa)

#### **PROGRAM PARTICIPANTS**

Benefits from the Land Tenure Services Project are projected to accrue to (i) rural households; (ii) urban households; (iii) communities; and (iv) businesses and investors in the form of increased income, lower transaction costs, and increased investment opportunities.

# **Sampling**

# **Study Population**

The universe for this study included about 55,150 households (total population estimate 260,000) residing in the five study bairros in Nampula and 8,897 households (total population estimate (38,000) residing in 11 study bairros in Monapo.

# Sampling Procedure

To estimate the total sample size for this IE design, the evaluator treated Nampula city and Monapo Vila as two independent evaluations, but both addressed the same impact questions for similar interventions. In step 1, the evaluator applied the power calculation based on a simple random sampling method to estimate the minimum required sample size based on the following parameter values: a power (k) of 80%, a significance level (a) of 0.10, portion of subjects allocated to treatment group (P=0.5), and a standardized minimum detectable effect size (MDE) of 0.25. In the second step, the estimated sample size from SRS was multiplied by the design effect (2.0) to get an effective sample size. However, given the potential attrition rate for the longitudinal survey, in step 3, the sample size was increased for both the urban areas in the baseline survey by a factor of 13% and 11% for Nampula (which is more urbanized) and Monapo (which is peri-urban and more rural); respectively. The end result of all the three steps is an estimated total sample size for the IE design of 900 and 880 households for Nampula city and Monapo Vila; respectively.

The sampling frame for the purpose of this evaluation is defined as "households that have land in the given municipality." A two-stage sample design was used for selecting the households for the survey in most bairros. The sampling frame was based on the data and cartography from the 2007 Mozambique Census. The primary sampling units (PSUs) were defined as the enumeration areas (EAs), which are operational segments defined for the census enumeration. The EAs have an average of about 100 households each, which is an effective size for conducting a new listing of households in the sample EAs. The sampling frame is updated through the listing in sample EAs to represent the current population of each bairro. In each of the smaller bairros with 12 or less EAs the entire bairro was listed, and one-stage sampling was used, as explained in the next section. A listing of households was then conducted in each sample quarteirão for the selection of households at the second sampling stage.

Each bairro was considered a separate sampling stratum. Within each stratum the EAs in the sampling frame were ordered geographically in order to provide additional implicit stratification and ensure a representative geographic distribution of the sample. The units of analysis for the survey are the individual households and the persons within each household. The total number of households surveyed turned out to be 1,690 in urban areas: 881 in Nampula city and 809 in Monapo vila.

# Deviations from Sample Design

The survey covered 1,690 households in both Nampula and Monapo. Muhaivire was initially sampled as a control site, but was subsequently changed to a treatment site.

# Weighting

The basic weight for each sample household would be equal to the inverse of its probability of selection (calculated by multiplying the probabilities at each sampling stage). The sampling probabilities at each stage of selection were maintained in an Excel spreadsheet with information from the sampling frame for each sample enumeration area (EA). Weights were adjusted to take into account the non-interviews in each sample EA or bairro. For bairros in which two-stage sampling was used, the weights are calculated at the level of the sample EA, so it is advantageous to adjust the weights at this level.

In the case of the bairros with a one-stage sample of households, the weights were adjusted at the bairro level. For this survey the strata are defined as the bairros. In the case of the bairros where two-stage sampling was used, the PSUs are the EAs, so there should be a unique PSU code for each sample EA. However, for the bairros where one-stage sampling was used, the PSUs are the individual households, so each household should have a unique PSU code.

# **Questionnaires**

## Overview

The evaluation will use a household level survey that will include interviewing the head of the household based. The questionnaire includes more than 25 sections encompassing modules on:

- 1. Household characteristics (demographic information by each member of the HH)
- 2. Employment and sources of any other cash transfers
- 3. Identification and list of all the parcels
- 4. Land conflicts
- 5. Rights to the land and perceptions of the risk
- 6. Parcels rented out, rented in
- 7. Characteristics of parcels
- 8. Investments on land
- 9. Perceptions about the DUAT, renting land and the land law
- 10. Relative space occupied by crops in the plot
- 11. Production and sales of basic food crops, cash crops, vegetables, fruits, nuts, etc.
- 12. Agricultural practices
- 13. Ownership of Assets
- 14. Monthly expenditures
- 15. Credit in the last 12 months
- 16. Livestock and sub-products produced and sold in the last 12 months
- 17. Consumption

The survey has detailed sections for each of the outcomes to be evaluated, both intermediate and final outcomes. In addition, each of the survey households will be geo-referenced.

# **Data Collection**

## **Data Collection Dates**

Start End Cycle

### **Data Collection Mode**

The data collection method used is household survey conducted in two selected urban areas in Nampula province, northern Mozambique. The data were collected by interviewing the head of the households using a structured questionnaire. The questionnaire included more than 25 sections encompassing modules on: Household characteristics (demographic information by each member of the HH); Employment and sources of any other cash transfers; Identification and list of all the parcels; Land conflicts; Rights to the land and perceptions of the risk; Parcels rented out, rented in; Characteristics of parcels; Investments on land; Perceptions about the DUAT, renting land and the land law; Relative space occupied by crops in the plot; Production and sales of basic food crops, cash crops, vegetables, fruits, nuts, etc.; Agricultural practices; Ownership of Assets; Monthly expenditures; Credit in the last 12 months; Livestock and sub-products produced and sold in the last 12 months; and Consumption Each of the survey households were geo-referenced for ease of locating them for the panel survey. In households that were male-headed with a spouse present, the spouse was the respondent for the livestock and food consumption modules. The survey was designed to take between 1 and 1 ½ hours to complete.

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### **Data Collectors**

Name	Abbreviation	Affiliation
Ministry of Agriculture	MINAG-DE	Mozambique

# **Data Processing**

# **Data Editing**

The data cleaning and information processing were done in Maputo and data analysis as well as the drafting of the report is being done in East Lansing. To assess the quality of information gathered by enumerators, each team supervisor was responsible for reviewing each completed questionnaire and verifying some selected questions in the households already interviewed and compares them with the answers already contained in the questionnaires duly filled in the same families. If the answers were different, the enumerator was advised to complete or correct the inconsistencies, making a second visit to the household in question in the presence of the supervisor.

# Other Processing

While the field work was taking place, the data entry clerks were recruited and trained. The data entry of questionnaires partly was done in Nampula and the remaining part was done in Maputo. The subsequent data cleaning, information processing was done in Maputo and data analysis as well as the drafting of the report is being done in East Lansing. The data collected was entered in CsPro and analyzed in STATA.

# **Data Appraisal**

No content available